



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,546	03/31/2004	Zhibin Wang	ORACL-01514US0	7403
80548	7590	09/09/2008		
Fliesler Meyer LLP 650 California Street 14th Floor San Francisco, CA 94108			EXAMINER BUI, HANH THI MINH	
			ART UNIT 2192	PAPER NUMBER
			MAIL DATE 09/09/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/814,546

**Applicant(s)**

WANG, ZHIBIN

**Examiner**

HANH T. BUI

**Art Unit**

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 21 May 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)  
3) ☒ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date 05/21/2008  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of Claims***

1. Applicant's amendment dated May 21<sup>st</sup>, 2008 responding to the February 21<sup>st</sup>, 2008 Office Action provided in the rejection of claims 1-21.
2. Claims 1, 2, 8, 9, 15 and 16 have been amended.
3. Claims 1- 21 are pending in the application, of which claims 1, 8 and 15 are in independent form and which have been fully considered by the examiner.

### ***Response to Amendment***

4. The 35 USC 112 rejection of claims 2, 8-21 have been withdrawn in view of Applicant's amendments to the claims.
5. The 35 USC 101 rejection of claims 1, 4-7 have been withdrawn in view of Applicant's amendments of the claims.

### ***Response to Arguments***

6. Applicants' arguments filed on May 21<sup>st</sup>, 2008 based on amended claims, have been considered but are moot in view of the new ground(s) of rejection. See McNeely et al. (Pub. No. 2002/0162059 – hereinafter, McNeely – art of record) in view of Dubovsky (Pub. No. 2003/0055836 – hereinafter, Dubovsky – art made of record) in detail below.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNeely et al. (Pub. No. 2002/0162059 – hereinafter, McNeely) in view of Dubovsky (Pub. No. 2003/0055836 – hereinafter, Dubovsky).

Regarding claim 1:

McNeely discloses *a system that provides a generic user interface testing framework, comprising:*

- *a computer including a computer readable medium, and a processor operating thereon;*

(McNeely discloses in Figure 1 and the associated text, e.g., para. [0007])

- *one or more different software test tools that can be invoked by a user to perform testing operations on the graphical user interface that is displayed while the software application is running, wherein each of the one or more different software test tools understand their own tool- specific scripting language;*

(McNeely discloses in Figure 6 and the associated text; "... Communication with GUI-based devices can **occur via a graphical user interface** if a suitable GUI tester is added via a new package ... a plurality of device-specific test case packages 404 (**one or more different software test tools**) ..." (emphasis added – See para. [0065]).

"...successfully interpret the command and produce an equivalent (***understand***) tool command language command (ST6) (***tool-specific scripting language***) ..." (emphasis added – See para. [0088]).

- *a test case input file stored on the computer readable medium, that contains a plurality of generic interface commands that are abstractions independent of any tool-specific scripting language, wherein the test case input file can be reused as necessary for testing against a software application's graphical user interface in any of the different software test tools;*

(McNeely discloses in Figure 7 and the associated text; "...**test cases** may include data files containing tool control language and **abstract command language instructions** ..." (emphasis added – See para. [0035]).

"... an abstract command language command (ST4) ..." (See para. [0087-0088]).

"... fully integrated **test case and test plan editor**, where test plans and their associated test cases are maintained in a version-controlled environment" (emphasis added – See para. [0017]).

"Test plan and **test case editor** 314 allows a user to **create and edit** individual **test cases** ..." (emphasis added – See para. [0046]).

- *an interpretive engine that executes on the computer, and that includes a plurality of dynamically loaded libraries corresponding to the plurality of different software test tools, and including a library for each of the one or more different software test tools, wherein the interpretive engine receives the generic interface commands*

*defined in the test case input file, determines which software test tool the user is currently using, loads required libraries to map the generic interface commands to corresponding tool-specific testing operations, uses the software test tool to perform the testing operations on the software application's graphical user interface including translating the generic interface commands to tool-specific commands, and reports to the user the success or failure of the testing operations;*

(McNeely discloses in Figure 6, 7 and the associated text; "a plurality of device-specific test case packages 404 (**plurality of dynamically loaded libraries**)" (emphasis added – See para. [0065]).

"extracts the appropriate (**corresponding**) communication interface packages (**library**) associated with each DUT (**software test tool**), as indicated in step ST2. Information may also be included in the test case file that identifies particular DUT operating software requirements associated with the test, in which case execution engine 400 accesses DUT software library 358 and directs the appropriate software loads to each DUT (ST3)" (emphasis added – See para. [0088]).

"Information contained within the test case file identifies (**determined**) one or more of the devices under test (**software test tool**) ... identifies (**determined**) particular DUT (**software test tool**) operating software requirements associated with the test" (emphasis added – See para. [0087]).

"based on the **mapping** provided by the appropriate communication interface package (**library**), **interprets** the **command** within the context of the specific DUT to

which the command refers (**corresponding tool-specific testing operations**) (ST5)" (emphasis added – See para. [0088]).

"produce an equivalent tool command language command (**tool-specific commands**)" (emphasis added - See para. [0088]).

"the resulting tool command language command is subsequently passed to the communication interface 420 (ST7) (**reports to user**)" (emphasis added – See para. [0089]))

- *an editor that allows the user to edit the test case input file, wherein the editor includes a rules-based wizard for assisting the user in generating different generic interface commands;*

(McNeely discloses in Figure 4 and the associated text; "Test plan and test case **editor** 314 allows a user to **create and edit** individual **test cases** ...", "**Editor** 314 is also adapted to interface with the **graphical user interface** 310 ..." (emphasis added – See para. [0046]: 3-6) and "The test cases are independent of the number of types ... test operator responsible for writing a test script **need not know the device-specific commands ... (rules-based wizard)**" (emphasis added – See para. [0015])).

- *wherein the rules-based wizard includes a plurality of user interface testing operations and wherein the rules-based wizard guides the user to pick from among the plurality of user interface testing operations to build the different generic interface commands.*

(McNeely discloses in Figure 6 and the associated text; "Each device-specific package includes device-specific commands ... titen package 402 provides the

functions step, invocableComponent, infoline, result, run\_testcase, try, startup, and cleanup ... " (See para. [0066-0083]))

But, McNeely does not explicitly teach:

- *a software application source code, stored on the computer readable medium, wherein the software application source code defines a software application under development, including a graphical user interface as part of the software application, and wherein the software application source code executes on the computer to display its graphical user interface;*

However, Dubovsky discloses in FIG 1 and the associated text; **"GUI application** 1 has y number of features. Each may include menu items, button bar items, windows, tabs and up to n number of **GUI objects**. GUI objects may include user input interface objects such as check boxes, radio buttons, text fields, etc." (emphasis added – See para. [0045]).

"test case generation, maintenance and execution required during the **development** and test cycle of a **GUI software project**" (emphasis added – See para. [0015])

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Dubovsky into the teachings of McNeely because such combination would have reduced the investment in manpower to implement, maintain and enhance automated test software as suggested by Dubovsky (See para. [0016]).

Regarding claim 2:

McNeely and Dubovsky disclose *the system of claim 1 wherein the system includes the test software tool stored locally on the computer.*

(McNeely further discloses "The client/server framework allows a client to be located on any system in the network, even on the same system on the which the server resides" (emphasis added – See para. [0010]: last three lines)).

Regarding claim 3:

McNeely and Dubovsky disclose *the system of claim 1 wherein the test software tool is stored at another computer or machine.*

(McNeely further discloses in Figure 3 and the associated text; "Test management system client 214 communicates with test tools server 210 via network 216 and allows a user to perform a number of activities associated with test system" (See para. [0037]) and "test management system client 214 accesses a test plan and associated test case files from test tools server 210 ..." (See para. [0039]: 1-4).

Examiner noted that in order to perform the testing, client has to communicate with server, therefore the test software tool is stored at another computer or machine.).

Regarding claim 4:

McNeely and Dubovsky disclose *the system of claim 1 wherein the editor provides a graphical interface to allow the tester to enter said test commands.*

(McNeely further discloses in Figure 4 and the associated text; "Test plan and test case **editor 314** allows a user to **create and edit** individual **test cases ...**" (emphasis added – See para. [0046]) and "**Editor 314** is also adapted to interface with the **graphical user interface 310 ...**" (emphasis added – See para. [0057])).

Regarding claim 5:

McNeely and Dubovsky disclose *the system of claim 1 wherein the editor communicates the test commands as a script of directives.*

(McNeely further discloses "test case may be a file of **commands or directives**" (emphasis added – See para. [0012]; line 5)).

Regarding claim 6:

McNeely and Dubovsky disclose *the system of claim 1 wherein the test commands can be created offline and subsequently communicated to the interpretive engine.*

(McNeely further discloses "downloads the test to execution engine 4000" (See para. [0087]: 9).

Examiner noted that the test case was created offline and then downloaded to the engine via network communication.).

Regarding claim 7:

McNeely and Dubovsky disclose *the system of claim 1 wherein the test software tool can be removed and replaced with another test software tool.*

(McNeely further discloses "a suitable GUI tester is added via a new package"  
(See para. [0065]: last line).

Examiner noted that when there are unsuitable test software tools, then that test can be removed and replaced with new test software tools.).

Regarding claim 8:

This is another method version of the rejected claim 1 above, wherein all the limitations of this claim have been noted in the rejection of claim 1.

Regarding claim 9:

The rejection of base claim 8 is incorporated. All the limitations of this claim have been noted in the rejection of claim 2.

Regarding claim 10:

The rejection of base claim 8 is incorporated. All the limitations of this claim have been noted in the rejection of claim 3.

Regarding claim 11:

The rejection of base claim 8 is incorporated. All the limitations of this claim have been noted in the rejection of claim 4.

Regarding claim 12:

The rejection of base claim 8 is incorporated. All the limitations of this claim have been noted in the rejection of claim 5.

Regarding claim 13:

The rejection of base claim 8 is incorporated. All the limitations of this claim have been noted in the rejection of claim 6.

Regarding claim 14:

The rejection of base claim 8 is incorporated. All the limitations of this claim have been noted in the rejection of claim 7.

Regarding claim 15:

This is another computer readable medium version of the rejected claim 1 above, wherein all the limitations of this claim have been noted in the rejection of claim 1.

Regarding claim 16:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 2.

Regarding claim 17:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 3.

Regarding claim 18:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 4.

Regarding claim 19:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 5.

Regarding claim 20:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 6.

Regarding claim 21:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 7.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh T. Bui whose telephone number is (571) 270-1976. The examiner can normally be reached on 9:30 AM - 4:30PM / Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. T. B./  
Examiner, Art Unit 2192

/Tuan Q. Dam/  
Supervisory Patent Examiner, Art Unit 2192